11: India G-4,5 (1960-1961) 1962 AWll Kerala AWll

transport activities of the State. About 240,000 tons of imports and 310,000 tons of exports of the State are handled, mostly in stream, and carried to and from the port by the inland waterway system. The role of the port and of the inland waterway system as a feeder in the transport activity of the State is likely to grow along the lines outlined in a later section.

8.33 Studies made by the Intermediate Ports Committee show that Neendakara which is six miles north of Cochin, can, if developed, serve the industries in the Quilon-Kundara area to the extent of an annual traffic of 400,000 tons comprising cashewnuts, ilmenite, etc. Koilthottam, at present handling the ore traffic, may stabilize its present traffic. Industrial developments around Calicut, such as the rayon pulp industry expected to come up at Mavur, may push the traffic at that port to over half a million tons by 1971.[1]

8.34 Several improvements were made at the Port of Cochin. With continuing increase in the import of oil, two tanker berths had to be constructed at a cost of Rs. 17.4 lakhs at Ernakulam channel to ensure safety and quicker turn-round. The pipe-line leading to the shore installations was commissioned in 1956. Three of the four additional wharf berths provided with crane, railway track, transit sheds, warehouses, open stacking space and other facilities at an estimated cost of Rs. 2.96 crores are almost ready.

8.35 Total expenditure on the development of minor ports of the State was expected to be Rs. 22.6 lakhs in the Second Plan.

8.36 Pending more detailed information regarding actual investment expenditure between 1956-57 and 1960-61, it may be estimated that the investment in the State in the Second Plan on transport–railways, roads, bridges, buses, inland waterways and ports, was about Rs. 11.14 crores. It appears that in the first four years of the Plan the actual expenditure was about Rs. 7.18 crores, i.e., about 64.5 per cent of the financial allocations had been spent. In the Third Plan period and in the Fourth, every effort must be made to fulfil as nearly as possible the physical and financial targets, as transport arrangements must be ready in advance to receive the anticipated volume of traffic without creating bottlenecks.

AIR TRAFFIC

8.37 The airports at Trivandrum and Cochin are served daily by a clockwise and an anti-clockwise service touching (*a*) Madras, Trichy, Madurai, Trivandrum, Cochin and (*b*) Coimbatore, Bangalore, Madras and Cochin. Cochin is also served by a daily service from Bombay *via* Belgaum. About 400 passengers travel every month by each of these services. About 350 passengers travel from Cochin to Belgaum and Bombay every month and 70 between Bombay and Trivandrum *via* Cochin or Bangalore. The prospects of this traffic are being studied at present by the National Council

[1] For particulars of a detailed assessment of traffic prospects at Calicut, Beypore vide *Report of Traffic Survey of Beypore*, NCAER, 1962.

11: India G-4, 5 (1960-1961) 1962 AWll Kerala AWll

for Indian Airlines Corporation.[1]

8.38 The absence of an air-link between Calicut and Trivandrum is being keenly felt, as other forms of travel including railways to and from Kerala's capital involve a long and time-consuming journey with the difficulties attendant on the break-of-gauge at Ernakulam.

ECONOMIC DEVELOPMENT AND TRANSPORTATION DEMANDS IN KERALA DURING 1961-71

8.39 An assessment of traffic that the implementation of the programmes proposed elsewhere in this survey will generally indicate that an additional overall traffic of 5 million tons can be anticipated during 1970-71. The nature, magnitude and composition of the anticipated traffic are set out in Table 41.[2]

8.40 The estimate does not take into account traffic in certain items, for example, coconuts and certain types of consumer goods. An allowance of 10 per cent may be made for these omissions. Further, the transport system of the State, besides meeting the additional demands of its own traffic, will have to bear the burden of traffic of other States, such as Madras or Mysore, which is handled for them at Kerala's ports[3] and on roads and railway sections[4] within the territory of the State; the additional traffic on this account may amount to 1 or 1.5 million tons by 1970-71. The overall growth in traffic may thus be between 60 and 65 per cent over the present level.[5] The transport arrangements in the State have thus to be planned and developed to meet an additional traffic of 6.5 to 7 million tons by 1971.

8.41 There may be some changes in the character of the traffic. For instance, there may be a decline in the traffic in firewood by about 100,000 tons as oil and other fuels are coming in as substitutes. Changes in technology in the Fourth Plan period presage the disappearance of the traffic in gypsum (145,000 tons) to Alwaye and substitution by imports of sulphur (100,000 tons) *via* Cochin. Decline in foreign imports of foodgrains is anticipated, while increased imports from more distant sources inside the country are envisaged.

8.42 The distribution of the State's additional traffic between different media (including the demand for ports' services) as anticipated, is presented in the table below. The heavy dependence of Kerala on the import of materials for industry from outside is reflected in the preponderant inter-State rail traffic. By 1971 the increase in the rail traffic in the State over its traffic in 1958-59 may be about 60 per cent.[6]

[1] An Air Traffic Survey has since been completed by NCAER for the Indian Airlines Corporation. Besides estimating the traffic potential of the circular route in the Southern Region, the Survey has recommended air linking of Calicut, inclusion of Trivandurm in the Madras—Tiruchirapalli, Madurai—Colombo air route, location at Thirukakara of an airport for Cochin and Alwaye, terminal facilities at the Cochin Airport, etc.
—Vide *Air Traffic Survey—Southern Region*, NCAER, 1962

[2] Predominantly at Cochin.

[3] Mostly on the highway and railway section between Ernakulam and Shoranur.

[4] The current traffic by road, rail and waterways is estimated at 10.8 million tons.

[5] The cross traffic to or from Cochin and from or to other States is taken into account.

[Table 41, appearing on p. 296 of the text, has not been processed--Analyst]